please enter the claims Amendment; filed 2/28/2005. Thankyon Poplicant: Robert L. Maresca et al.. "Attorney's Docket No.: 02103-310002/AABOSQ89-

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## Amendments to the Claims:

The following is a listing of all claims and replaces all prior listings.

## Listing of Claims:

1. (original) Position detection apparatus, comprising:

> an accelerometer for providing an acceleration signal representative of acceleration of a movable element,

> a combining network having an acceleration input for receiving said acceleration signal, a position input for receiving a position signal representative of position of said movable element, and an output for providing an inferred position signal representative of an inferred position of said movable element,

> said network including a first signal processor for processing said acceleration signal to provide a modified acceleration signal, said first signal processor comprising a low-pass filter,

- a second signal processor for processing said position signal to provide a modified position signal, and
- a combiner for additively combining said modified acceleration signal with said modified position signal to provide said inferred position signal.
- 2. (original) Position detection apparatus in accordance with claim 1, further comprising:
  - a second accelerometer, for providing a reference element signal representative of acceleration of a reference element;
    - a differential acceleration measuring element, comprising
    - a first acceleration input for receiving said movable element acceleration signal,
  - a second acceleration input for receiving said reference element acceleration signal, and